

Isotopes are a critical component of the forensic science toolbox. The following table provides a comprehensive overview of the various isotopes used in forensic science, categorized by their application. The table is organized into two main sections: **Stable Isotopes** and **Radioactive Isotopes**. Each section lists the isotope, its chemical symbol, its half-life, and its primary application in forensic science. The table is designed to be a quick reference for forensic scientists and students alike.

Isotope	Chemical Symbol	Half-life	Primary Application
Carbon-12	^{12}C	Stable	Stable Isotope Analysis (SIA)
Carbon-13	^{13}C	Stable	Stable Isotope Analysis (SIA)
Carbon-14	^{14}C	5,730 years	Radioactive Isotope Analysis (RIA)
Hydrogen-1	^1H	Stable	Stable Isotope Analysis (SIA)
Hydrogen-2	^2H	Stable	Stable Isotope Analysis (SIA)
Hydrogen-3	^3H	12.3 years	Radioactive Isotope Analysis (RIA)
Oxygen-16	^{16}O	Stable	Stable Isotope Analysis (SIA)
Oxygen-17	^{17}O	Stable	Stable Isotope Analysis (SIA)
Oxygen-18	^{18}O	Stable	Stable Isotope Analysis (SIA)
Nitrogen-14	^{14}N	Stable	Stable Isotope Analysis (SIA)
Nitrogen-15	^{15}N	Stable	Stable Isotope Analysis (SIA)
Nitrogen-16	^{16}N	7.1 seconds	Radioactive Isotope Analysis (RIA)
Sulfur-32	^{32}S	Stable	Stable Isotope Analysis (SIA)
Sulfur-33	^{33}S	Stable	Stable Isotope Analysis (SIA)
Sulfur-34	^{34}S	Stable	Stable Isotope Analysis (SIA)
Sulfur-35	^{35}S	87.1 days	Radioactive Isotope Analysis (RIA)
Chlorine-35	^{35}Cl	Stable	Stable Isotope Analysis (SIA)
Chlorine-37	^{37}Cl	Stable	Stable Isotope Analysis (SIA)
Chlorine-36	^{36}Cl	3.01 × 10 ⁵ years	Radioactive Isotope Analysis (RIA)
Potassium-39	^{39}K	Stable	Stable Isotope Analysis (SIA)
Potassium-40	^{40}K	1.25 × 10 ¹⁰ years	Radioactive Isotope Analysis (RIA)
Potassium-41	^{41}K	Stable	Stable Isotope Analysis (SIA)
Calcium-40	^{40}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-42	^{42}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-43	^{43}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-44	^{44}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-45	^{45}Ca	162.8 days	Radioactive Isotope Analysis (RIA)
Calcium-46	^{46}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-47	^{47}Ca	4.5 days	Radioactive Isotope Analysis (RIA)
Calcium-48	^{48}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-49	^{49}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-50	^{50}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-51	^{51}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-52	^{52}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-53	^{53}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-54	^{54}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-55	^{55}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-56	^{56}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-57	^{57}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-58	^{58}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-59	^{59}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-60	^{60}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-61	^{61}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-62	^{62}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-63	^{63}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-64	^{64}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-65	^{65}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-66	^{66}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-67	^{67}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-68	^{68}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-69	^{69}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-70	^{70}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-71	^{71}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-72	^{72}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-73	^{73}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-74	^{74}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-75	^{75}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-76	^{76}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-77	^{77}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-78	^{78}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-79	^{79}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-80	^{80}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-81	^{81}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-82	^{82}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-83	^{83}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-84	^{84}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-85	^{85}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-86	^{86}Ca	Stable	Stable Isotope Analysis (SIA)
Calcium-87	8		

ADDITIONAL STATEMENT:
Any specific condition or setback issue and other matter of zoning classification are the subject of this application. The applicant certifies that the proposed use is in compliance with the ordinance in the zoning of the subject property or compliance with zoning regulations for the structure or businesses on the subject property.

Subject Property (Currently Zoned A-C-1 (City of Mason))
Planning Staff:
Staff: 25
Staff: 26
Staff: 507

Public Streets () none
Public Street Enclosures () none
Public Drainage Elements () none
Public Transportation () none

Mitchell Davis

MacDonald Number III

[Signature]

date _____

Agent B Number _____

date _____

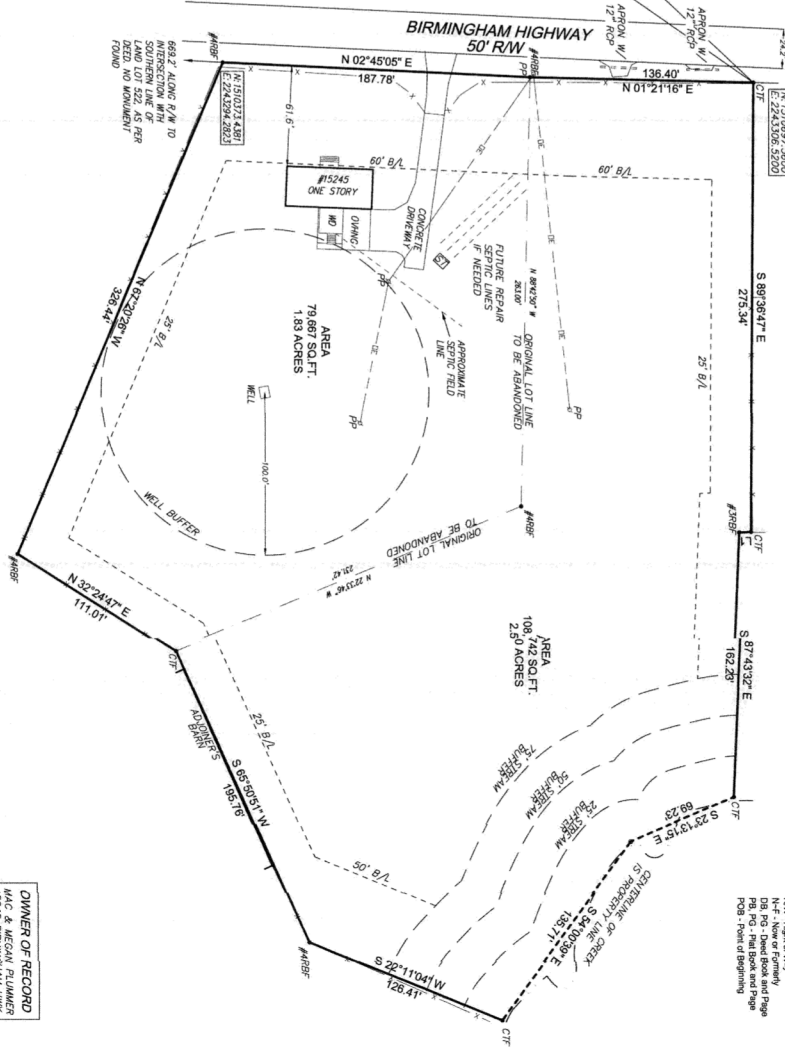
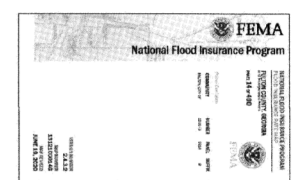
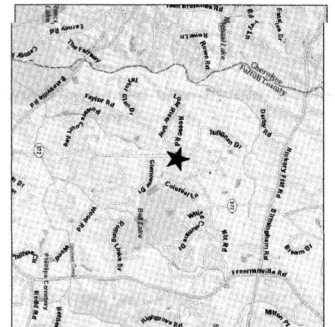
The Director of the Department of Community Development of Miami, Georgia, certifies that this plan complies with the City of Milton Zoning Ordinance, Conditions of Zoning, and the City of Milton Subdivision Regulations as amended.

Robert Busem
Director, Department of
Community Development

Date 5/11/14

is hereby certified that this map is true and correct, and was prepared from an actual survey of the property, made by me or under my supervision, that all monuments shown actually exist, or are marked as "future", and their locations, size, type and material are correctly shown.

The information The endorsed land surveyor certifies that the plot complies with the applicable technical standards for zoning purposes in Ontario and set forth in the rules and regulations of the Ontario Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.A. Section 15-6-67.



- [illegible]

LINE BEARING DISTANCE
1 S 07°33'45" E 17.16'

TOTAL AREA
188,409 SQ. FT.
4.33 ACRES

0 50 100 150

FOOTHILLS
LAND SURVEYING, INC.
8450 KNOX BRIDGE HWY
CANTON, GA 301
(678) 533-8657
www.foothillandsurveying.com

LOT COMBINATION PLAT PREPARED BY
MCDONALD PLUMMER
MEGAN B PLUMMER

DATE:	10/21/20
SCALE:	1"=50'
DRAWING:	20-28
COORD:	
REVISIONS:	
SHEET #:	1 of 1